STATUS OF THE CLAIMS

1. (Currently amended) A method for obtaining a population of cells ~~enriched for umbilical cord matrix stem cells~~ from an umbilical cord comprising: (a) enzymatically dispersing umbilical cord matrix to provide ~~a fraction of cells comprising~~ enzymatically dispersed umbilical cord matrix ~~stem~~ cells, (b) exposing the enzymatically dispersed umbilical cord matrix cells to conditions suitable for ~~stem~~ cell proliferation, wherein said conditions comprise culturing in the presence of Epidermal Growth Factor and Platelet Derived Growth Factor and (c) passaging said enzymatically dispersed umbilical cord matrix cells to remove non-adherent cells thus selecting a ~~fraction~~ population of cells ~~enriched for umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells~~ that are characterized by being negative for CD34 and CD45, positive for telomerase activity, can be expanded in vitro, and maintained in culture through repeated passages.

2. (Cancelled).

3. (Currently amended) A ~~culture of cells comprising a~~ population of cells ~~enriched for umbilical cord matrix stem cells~~ isolated by (a) enzymatically dispersing umbilical cord matrix to provide a fraction of cells comprising enzymatically dispersed umbilical cord matrix ~~stem~~ cells , (b) exposing the enzymatically dispersed umbilical cord matrix cells to conditions suitable for ~~stem~~ cell proliferation, wherein said conditions comprise culturing in the presence of Epidermal Growth Factor and Platelet Derived Growth Factor and (c) passaging said umbilical cord matrix cells to remove non-adherent cells thus selecting a ~~fraction~~ population of cells ~~enriched for umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells in said population~~ that are characterized by being negative for CD34 and CD45, positive for telomerase activity, can be expanded in vitro, and be maintained in culture through repeated passages.

4-11. (Cancelled).

12. (Currently amended) A method of generating a bank of cells comprising a desired population of ~~cells enriched for~~ umbilical cord matrix ~~stem~~ cells from an umbilical cord matrix, the method comprising: (a) enzymatically dispersing umbilical cord matrix to provide a fraction of cells comprising enzymatically dispersed umbilical cord matrix ~~stem~~ cells, (b) exposing the enzymatically dispersed umbilical cord matrix to conditions suitable for ~~stem~~ cell proliferation and, wherein said conditions comprise culturing in the presence of Epidermal Growth Factor and Platelet Derived Growth Factor and (c) passaging said umbilical cord matrix cells to remove non-adherent cells thus selecting a ~~fraction~~ population of cells ~~enriched for umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells in said population~~ that are characterized by being negative for CD34 and CD45, positive for telomerase activity, can be expanded in vitro, and be maintained in culture through repeated passages.

13. (Original) The method of claim 12 further comprising tissue typing, banking and expanding the umbilical cord matrix stem cells needed.

14. (Withdrawn) The method of claim 12 further comprising differentiating the umbilical cord matrix stem cells in vitro.

15. (Cancelled).

16. (Previously presented) The method of claim 12 further comprising passaging the fraction of cells enriched for umbilical cord matrix stem cells for at least 10 times and the umbilical cord matrix stem cells remaining stable.

17. (Previously presented) The method of claim 12 wherein the umbilical cord matrix stem cells are from any amniotic species.

18. (Previously presented) The method of claim 12 wherein the umbilical cord matrix stem

cells are human cells.

19. (Previously presented) The method of claim 12 wherein the umbilical cord matrix stem cells are porcine or bovine cells.

20. (Previously presented) The method of claim 12 wherein the umbilical cord matrix stem cells are equine or canine cells.

21. (Previously presented) The method of claim 12 wherein the umbilical cord matrix stem cells are rodent cells.

22-31. (Cancelled).

32. (Withdrawn) A method of transplanting the cell of claim 1, the method comprising: transplanting that cell into an animal that can benefit from a stem cell transplant.

33. (Withdrawn) A method of treating an animal for alleviation of a disease symptom, the method comprising obtaining a UCMS cell isolated from a source of such cells derived from umbilical cord other than cord blood and transplanting that UCMS cell into an animal that can benefit from a stem cell transplant.

34. (Currently amended) A population of cells ~~comprising human UCMS cells comprising: cells~~ isolated by (a) enzymatically dispersing umbilical cord matrix to provide a fraction of cells comprising enzymatically dispersed umbilical cord matrix ~~stem~~ cells , (b) exposing the enzymatically dispersed umbilical cord matrix to conditions suitable for ~~stem~~ cell proliferation and, wherein said conditions comprise culturing in the presence of Epidermal Growth Factor and Platelet Derived Growth Factor and (c) passaging said umbilical cord matrix cells to remove non-adherent cells thus selecting a ~~fraction~~ population of cells ~~enriched for umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells in said population~~ that are characterized

by being negative for CD34 and CD45, positive for telomerase activity, proliferate in an in vitro culture for over one year, maintain a karyotype in which all the chromosomes of the human are present and not noticeably altered through prolonged culture, and maintain the potential to differentiate.

35. (Currently amended) The stem cells of claim 34 wherein the population of cells comprising human UCMS cells are typed, banked or expanded.

36-40. (Cancelled).

41. (Currently amended) An umbilical cord matrix ~~stem~~ cell culture comprising an ~~stem~~ umbilical cord matrix cell population and a feeder cell population, the culture comprising: (a) a population of cells enriched for umbilical cord matrix ~~stem~~ cells isolated by (a) enzymatically dispersing umbilical cord matrix to provide a fraction of cells comprising enzymatically dispersed umbilical cord matrix ~~stem~~ cells , (b) exposing the enzymatically dispersed umbilical cord matrix to conditions suitable for ~~stem~~ cell proliferation and, wherein said conditions comprise culturing in the presence of Epidermal Growth Factor and Platelet Derived Growth Factor and (c) passaging said umbilical cord matrix cells to remove non-adherent cells thus selecting a ~~fraction~~ population of cells ~~enriched for umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells in said population~~ that are characterized by being negative for CD34 and CD45, positive for telomerase activity, proliferate in an in vitro culture for over one year, maintain a karyotype in which all the chromosomes of the human are present and not noticeably altered through prolonged culture, and maintain the potential to differentiate; and (b) a feeder cell population comprising a population of cells enriched for amniote UCM~~S~~ cells, said feeder cells incapable of beginning or conducting a mitotic process, but capable of providing growth factors.

42. (Currently amended) The ~~stem~~ cell culture of claim 41 wherein the population of cells enriched for umbilical cord matrix ~~stem~~ cells are typed, banked or expanded.

43. (Currently amended) The ~~stem~~ cell culture of claim 42 wherein the population of cells enriched for umbilical cord matrix ~~stem~~ cells and the feeder cells are of human origin.

44-46. (Cancelled).